

## Metering device having shuttle and spool valve

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**Inventor:** PENN LAURENCE RICHARD (GB)  
**Applicant:** PENN LAURENCE RICHARD (GB)  
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### Abstract of GB2377425

A metering device has a chamber 1 with a shuttle 6 therein, and a valve 40 adapted to control the flow of fluid to an end of the chamber 1, causing the shuttle 6 to move axially and displace fluid from the opposite end. Fluid is then subsequently supplied to the other side of the shuttle 6, causing it to move back to its initial position thus dispensing liquid from the other side. The valve 40 which controls the flow of fluid to each side of the shuttle is a spool valve, which can be moved from a first position where it forms a flow path between the inlet duct 25 and a first end 9 of the chamber and a second end 8 of the chamber and an outlet duct 27, to a second position where it forms a flow path between the inlet duct 25 and the second end of the chamber 8, and the first end of the chamber 9 and the outlet duct 28. A modification of the device (see figure 6) may be used to dispense two different products from either side of the shuttle, such as two components of an adhesive. A solvent may be present to contact the shuttle and avoid reaction between the two products.

